

Dear Board Members,

I am deeply concerned about the proposed interim limits for effluents that drain out the \*Magenta Drain\* from Empire Mine State Park. This waterway is not \*out in the country.\* It passes thru a community park within \* of Grass Valley City Hall then joins a small creek that flows past Hennessy elementary school. From there, it flows thru Grass Valley downtown, literally one block from Main St.

The proposed interim limits for cadmium, 2100 ug/L is 8000 times the limits deemed acceptable in the Water Quality Control Plan for the Sacramento River Basin. At 5 ppb cadmium causes nausea, vomiting, diarrhea, muscle cramps, salivation, sensory disturbances, liver injury, convulsions, shock and renal failure. The International Agency for Research on Cancer (IARC) has determined that cadmium is carcinogenic to humans. A concentration of 0.001 mg/l in freshwater hardness above 100 mg/l CaCO<sub>3</sub> is considered harmful to aquatic life. (<http://www.probeinternational.org/ebi/contaminants/cadmium.html>). EPA has set a maximum contaminant level of 0.005 ug/L cadmium for drinking water (<http://www.epa.gov/safewater/mcl.html#mcls>)

The proposed interim limits on lead, 560 ug/L is 2000 times the limits deemed acceptable in the Water Quality Control Plan for the Sacramento River Basin. The Centers for Disease Control says lead poisoning is the most common and devastating environmental disease affecting young children. (<http://orgs.unca.edu/eqi/lead.htm>) The EPA has set a maximum contaminant level of ZERO ug/L lead for drinking water with an \*action level\* of .015 ug/L (<http://www.epa.gov/safewater/mcl.html#mcls>) The proposed interim limits on Thallium, 5900 ug/L is 3000 times the limits deemed acceptable in the Water Quality Control Plan for the Sacramento River Basin. Thallium can affect the human nervous system, lung, heart, liver, and kidney if large amounts are eaten or drunk for short periods of time. Temporary hair loss, vomiting, and diarrhea can also occur and death may result after exposure to large amounts of thallium for short periods. Thallium can be fatal from a dose as low as 1 gram. (<http://www.atsdr.cdc.gov/toxprofiles/phs54.html>) The EPA has set a maximum contaminant level of .005 ug/L lead for drinking water (<http://www.epa.gov/safewater/mcl.html#mcls>)

Levels for Zinc and Copper, known toxins for aquatic life, are several hundred times the limits deemed acceptable in the Water Quality Control Plan for the Sacramento River Basin.

The Empire mine has been aware of this problem ever since the Regional Board notified them in 1981. We are concerned that the park has not addressed this problem sooner. We are concerned that the park recently embarked on the multi-million dollar construction of a historical adit \*ride\* for visitors before protecting the well-being of the local residents.

We believe that the State Parks have the resources to address this problem well before the year 2010, as the interim limit allows. We are concerned that the parks have already had enough time to address this problem, and are not taking seriously the concerns of our community.

Please reduce the acceptable interim constituent levels and require final limits be met before 2010.

Sincerely,  
Cyndi Brinkhurst

To: Regional water Board, c/o  
Melissa Hall, mhall@waterboards.ca.gov  
NPDES Unit  
Central Valley Regional Water Quality Control Board

From: Dianna Winslow  
23-year resident of Nevada county  
dwinslow@syr.edu

Dear Board Members,

As a long-time resident of Nevada County and the City of Grass Valley, I am deeply concerned about the proposed interim limits for effluents that drain out the "Magenta Drain" from Empire Mine State Park. I raised my children in this town, at this community park, playing with them in the creek, unaware of the contaminants: no warnings were posted in this downstream community park, so how would a young mother new to the community know a creek running through the middle of a children's playground was deadly?

This waterway is not "out in the country." It passes thru a community park within ¼ of Grass Valley City Hall then joins a small creek that flows past Hennessy Elementary School. From there, it flows thru Grass Valley downtown, literally one block from Main Street. The State Park has been aware that a highly polluted creek has been flowing through these high-use public sites for more than two decades. And as if this negligence on the part of the State Park isn't enough, higher levels of killing-metals are to be permitted for another 6-10 years? Here are the facts:

The proposed interim limits for cadmium, 2100 ug/L is 8000 times the limits deemed acceptable in the Water Quality Control Plan for the Sacramento River Basin. At 5 ppb cadmium causes nausea, vomiting, diarrhea, muscle cramps, salivation, sensory disturbances, liver injury, convulsions, shock and renal failure. The International Agency for Research on Cancer (IARC) has determined that cadmium is carcinogenic to humans. A concentration of 0.001 mg/l in freshwater hardness above 100 mg/l CaCO<sub>3</sub> is considered harmful to aquatic life. (<http://www.probeinternational.org/ebi/contaminants/cadmium.html>). EPA has set a maximum contaminant level of 0.005 ug/L cadmium for drinking water (<http://www.epa.gov/safewater/mcl.html#mcls>)

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Levels for Zinc and Copper, known toxins for aquatic life, are several hundred times the limits deemed acceptable in the Water Quality Control Plan for the Sacramento River Basin.

The Empire Mine State Park has been aware of this problem ever since the Regional Board notified them in 1981. We are concerned that the park has not addressed this problem sooner. We are concerned that the park recently embarked on the multi-million dollar construction of a historical "ride" for visitors BEFORE protecting the well-being of the local residents--particularly the children who play in the park and in the creek.

We believe that the State Parks have the resources to address this problem well before the year 2010, as the interim limit allows. We are concerned that the parks have already had enough time to address this problem, and are not taking seriously the concerns of our community.

Please reduce the acceptable interim constituent levels and require final limits be met before 2010.

Sincerely,

Dianna Winslow, mother of two children and  
23-year resident of Nevada County

Dianna Winslow  
Writing Program  
Syracuse University  
315-256-1766

Dear Ms. Hall and Board Members;

Since many children, and adults, play in our park's waters I am deeply concerned about the proposed interim limits for effluents that drain out the "Magenta Drain" from Empire Mine State Park.

This waterway is not "out in the country." It passes thru a community park within ¼ of Grass Valley City Hall then joins a small creek that flows past Hennessy elementary school. From there, it flows thru Grass Valley downtown, literally one block from Main St.

I'd be interested to know what your decision might be on renewing the mine's permits to dump toxic waste into our public stream.

Thank you for your kind attention.

Susanna Wilson

To: Regional water Board, c/o mhall@waterboards.ca.gov  
 From: Barbara Roemer  
 Address: P.O. Box 326, North San Juan, CA 95960

Dear Board Members,

I am deeply concerned about the proposed interim limits for effluents that drain out the <sup>3</sup>Magenta Drain<sup>2</sup> from Empire Mine State Park. This waterway is not <sup>3</sup>out in the country.<sup>2</sup> It passes thru a community park within 1/4 mile of Grass Valley City Hall then joins a small creek that flows past Hennessy Elementary School. From there, it flows thru Grass Valley downtown, literally one block from Main St.

The proposed interim limits for cadmium, 2100 ug/L is 8000 times the limits deemed acceptable in the Water Quality Control Plan for the Sacramento River Basin. At 5 ppb cadmium causes nausea, vomiting, diarrhea, muscle cramps, salivation, sensory disturbances, liver injury, convulsions, shock and renal failure. The International Agency for Research on Cancer (IARC) has determined that cadmium is carcinogenic to humans. A concentration of 0.001 mg/l in freshwater hardness above 100 mg/l CaCO<sub>3</sub> is considered harmful to aquatic life.

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Levels for Zinc and Copper, known toxins for aquatic life, are several hundred times the limits deemed acceptable in the Water Quality Control Plan for the Sacramento River Basin.

The Empire mine has been aware of this problem ever since the Regional Board notified them in 1981. I am concerned that the park has not addressed this problem sooner. I am concerned that the park recently embarked on the multi-million dollar construction of a historical <sup>3</sup>ride<sup>2</sup> for visitors before protecting the well-being of the local residents.

I believe that the State Parks have the resources to address this problem well before the year 2010, as the interim limit allows. I am concerned that the parks have already had enough time to address this problem, and are not taking seriously the concerns of our community.

Please reduce the acceptable interim constituent levels and require final limits be met before 2010.

While this is a form letter, drafted by a local creek alliance, I fully support it and feel ardently that the Water Board must take action to protect public health.

Sincerely,

Barbara Roemer

To: Regional water Board, c/o mhall@waterboards.ca.gov

From: Glenn Miller

Address: 17373 Refuge Road, Nevada City, CA 95959

Dear Board Members,

I am deeply concerned about the proposed interim limits for effluents that drain out the <sup>3</sup>Magenta Drain<sup>2</sup> from Empire Mine State Park. This waterway is not “out in the country”. It passes thru a community park within 1/4 mile of Grass Valley City Hall then joins a small creek that flows past Hennessy Elementary School. From there, it flows thru Grass Valley downtown, literally one block from Main St.

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I believe that the State Parks have the resources to address this problem well before the year 2010, as the interim limit allows. I am concerned that the parks have already had enough time to address this problem, and are not taking seriously the concerns of our community.

Please reduce the acceptable interim constituent levels and require final limits be met before 2010.

While this is a form letter, drafted by a local creek alliance, my wife and I fully support the ideas herein and feel ardently that the Water Board MUST take action to protect public health.

Regards,

Glenn Miller

To: Regional water Board,  
c/o mhall@waterboards.ca.gov

From: Tony Pellegrino  
Address: 11393 Tom Ray Drive  
Grass Valley, CA 95949

Dear Board Members,

I am deeply concerned about the proposed interim limits for effluents that drain out the “Magenta Drain” from Empire Mine State Park. This waterway is not “out in the country.” It passes thru a community park within ¼ of Grass Valley City Hall then joins a small creek that flows past Hennessy elementary school. From there, it flows thru Grass Valley downtown, literally one block from Main St. Then into rural Grass Valley and a few hundred yards from my property. I have several neighbors and friends who own property on the creek.

The proposed interim limits for cadmium, 2100 ug/L is 8000 times the limits deemed acceptable in the Water Quality Control Plan for the Sacramento River Basin. At 5 ppb cadmium causes nausea, vomiting, diarrhea, muscle cramps, salivation, sensory disturbances, liver injury, convulsions, shock and renal failure. The International Agency for Research on Cancer (IARC) has determined that cadmium is carcinogenic to humans. A concentration of 0.001 mg/l in freshwater hardness above 100 mg/l CaCO<sub>3</sub> is considered harmful to aquatic life. (<http://www.probeinternational.org/ebi/contaminants/cadmium.html>). EPA has set a maximum contaminant level of 0.005 ug/L cadmium for drinking water (<http://www.epa.gov/safewater/mcl.html#mcls>)

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We believe that the State Parks have the resources to address this problem well before the year 2010, as the interim limit allows. We are concerned that the parks have already had enough time to address this problem, and are not taking seriously the concerns of our community.

Sincerely,

Tony Pellegrino

May 5, 2006

Ms. Hall,

This letter is in reference of the renewal of Empire Mine's authorization to release water having toxic chemicals particularly, arsenic into local water ways. I definitely oppose renewal of that authorization by any agency which grants such permission.

Respectfully ,  
Larry Lindauer  
Flying Cloud Rd.  
Grass Valley Ca.95945

Board Members

As a resident Of Grass Valley, I am writing you concerning the effluents that drain out the “Magenta Drain” from Empire Mine State Park. The effluent drains right through the middle of our city.

The proposed interim limits for cadmium from the Magenta Drain, far exceeds the limits acceptable in the Water Quality Control Plan for the Sacramento River Basin. That cadmium in the water is carcinogenic to humans.

The Empire mine has been aware of this problem ever since the Regional Board notified them in 1981. The park has not addressed protecting the well-being of the local residents.

I believe that the State Parks have the resources to address this problem way before the year 2010, as the interim limit allows. Please reduce the acceptable interim constituent levels and require final limits be met before 2010.

Sincerely,

Gary Pierazzi

Dear Ms Hall,

I am a 100% disabled veteran (decorated with both Silver and Bronze Stars) who has lived in or near Grass Valley for over thirty years. I am writing to urge you to all in your power to end the practice of allowing the Empire Mine to drain contaminated water into our public waterways. As you know, the Majenta Drain flows into Grass Valley's Memorial Park and onward into Wolf Creek. I feel it is an insult and moral abomination to have the poisonous water (arsenic and heavy metals) passing though the memorial honoring so many of my fallen comrades, and urge you to do all in your power to end this practice.

Sincerely,

William Larsen

Dear Board Members,

Thank you for your time in reviewing my letter. My name is Lynell Garfield, I am an Aquatic Toxicologist and lived in Grass Valley and Nevada County for four years.

I am seriously concerned about the proposed interim limits for effluents draining Empire Mine State Park, namely the “Magenta Drain”. This waterway has human contact within community parks in Grass Valley, immediately adjacent to childrens' playgrounds, ballfields, and barbeque areas, within ¼ mile of



the Grass Valley City Hall, joining Wolf Creek in the downtown area. There are agricultural diversions on Wolf Creek shortly downstream, and it is used as raw water supply for agriculture, including organic farms.

The Empire Mine State Park was notified of this problem by the CVRWQCB in 1981. It is appalling that the park has not addressed this problem sooner, and that the park recently embarked on the multi-million dollar construction of a historical railroad amusement “ride” for visitors far before protecting the well-being of local residents and resources.

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Levels for Zinc and Copper, known toxins for aquatic life, are several hundred times the limits deemed acceptable in the Water Quality Control Plan for the Sacramento River Basin. As you probably know, metals are easily translocated into growing plants, and concentrated in roots. Many tens of scientific studies have shown gold, mercury, and other metals are taken up efficiently by plants and transferred up the food chain accordingly.

It seems clear that the State Parks have the resources to address this problem well before the year 2010, as the interim limit allows. We are deeply concerned and saddened that the parks have been at the Yuba Watershed Council table for this amount of time, have been given sufficient time to address this problem by the Water Board, and have been reticent on finding solutions... especially with recent large expenditures for entertainment value. This sends the clear message that they do not take seriously the impacts on the public and environmental health of our community.

Please reduce the acceptable interim constituent levels and require final limits be met immediately, long before 2010.

Thank you.

Sincerely,

Lynell M. Garfield  
Co-Founder, Wolf Creek Community Alliance  
(530) 277-8719

To: Regional water Board, c/o mhall@waterboards.ca.gov

From: Rick Sanger

Address: 664-A Freeman Ln, PMB 888, Grass Valley, CA 95949

NOTE: Please see attached photos of Magenta Drain in Memorial Park

-where it enters the park there is a historical marker for mining!

-flows past picnic area

-flows past playground

Dear Board Members,

I am deeply concerned about the proposed interim limits for effluents that drain out the "Magenta Drain" from Empire Mine State Park. This waterway is not "out in the country." It passes thru a community park within ¼ of Grass Valley City Hall then joins a small creek that flows past Hennessy elementary school. From there, it flows thru Grass Valley downtown, literally one block from Main St.

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The Empire mine has been aware of this problem ever since the Regional Board notified them in 1981. We are concerned that the park has not addressed this problem sooner. We are concerned that the park recently embarked on the multi-million dollar construction of a historical adit “ride” for visitors before protecting the well-being of the local residents.

We believe that the State Parks have the resources to address this problem well before the year 2010, as the interim limit allows. We are concerned that the parks have already had enough time to address this problem, and are not taking seriously the concerns of our community.

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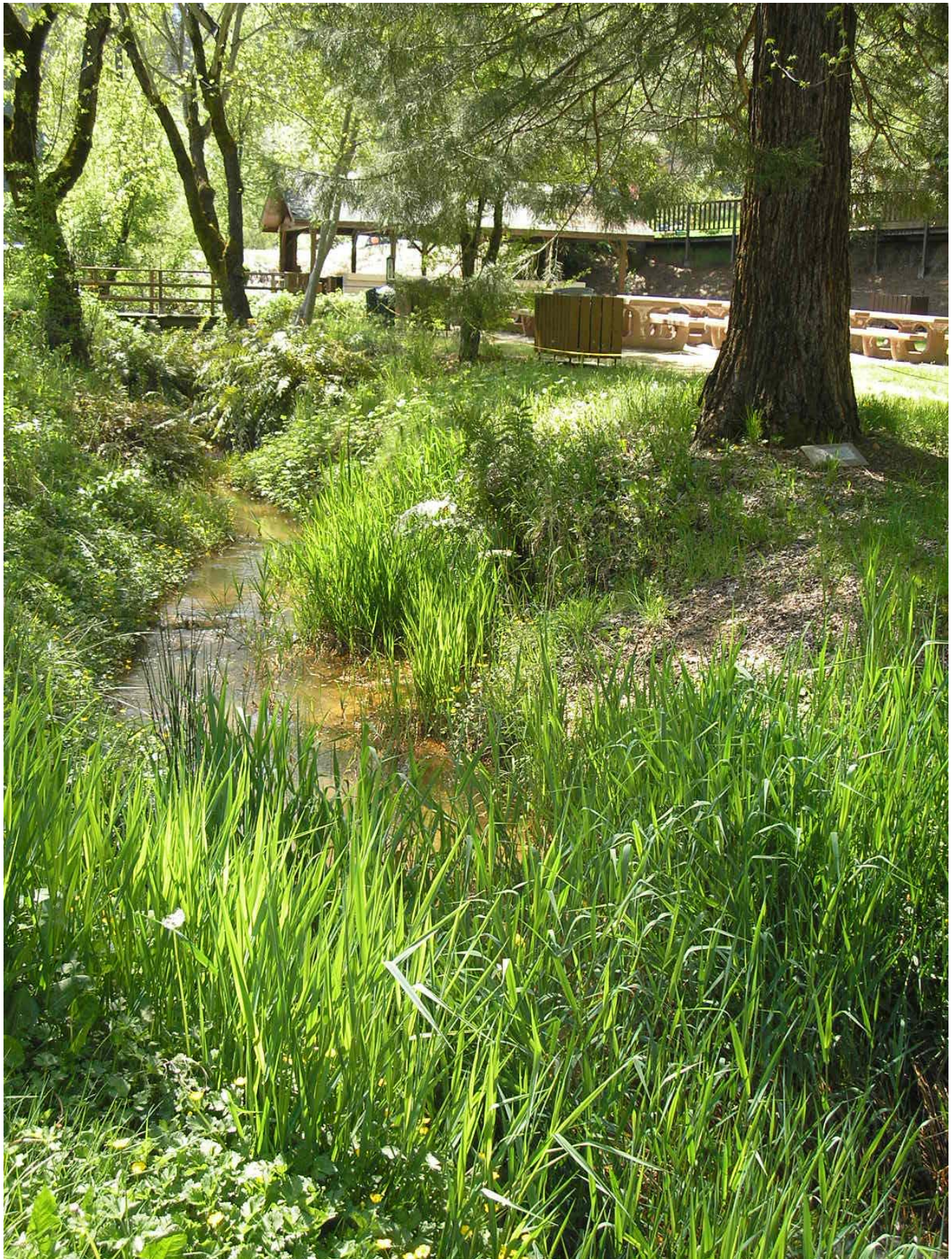
Rick Sanger  
President, Board of Directors  
Wolf Creek Community Alliance





















PLEASE revoke the renewal for the permit that allows Empire Mine to continue draining poisons, these poisons containing thousands of times of the allowable amounts of toxins, into our public waterways.

Thank you,

Sincerely,

Heather Reed, Grass Valley, California

To: Regional water Board, c/o mhall@waterboards.ca.gov

From: Julie Taylor and Ken Hardin

Address: 13312 Long Valley Road, Penn Valley, CA 95946

Dear Board Members,

I am deeply concerned about the proposed interim limits for effluents that drain out the Magenta Drain from Empire Mine State Park. This waterway is not out in the country. It passes thru a community park within ¼ of Grass Valley City Hall then joins a small creek that flows past Hennessy elementary school. From there, it flows thru Grass Valley downtown, literally one block from Main St.

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We believe that the State Parks have the resources to address this problem well before the year 2010, as the interim limit allows. We are concerned that the parks have already had enough time to address this problem, and are not taking seriously the concerns of our community.

Please reduce the acceptable interim constituent levels and require final limits be met before 2010. We would like to Nevada County to be a wonderful place for our children to raise their children.

Sincerely,  
Julie Taylor, Ken Hardin

Dear Board Members,

As one who lives on Wolf Creek, I am deeply concerned about the proposed interim limits for effluents of the "Magenta Drain" at Empire Mine State Park. This waterway is not "out in the country." It passes through a community park within ¼ mile of Grass Valley City Hall then joins a small creek that flows past Hennessy Elementary School. From there, it flows through downtown Grass Valley, literally one block from Main Street.

The proposed interim limits for cadmium, 2100 ug/L is 8000 times the limits deemed acceptable in the Water Quality Control Plan for the Sacramento River Basin. At 5 ppb cadmium causes nausea, vomiting, diarrhea, muscle cramps, salivation, sensory disturbances, liver injury, convulsions, shock and renal failure. The International Agency for Research on Cancer (IARC) has determined that cadmium is carcinogenic to humans. A concentration of 0.001 mg/l in freshwater hardness above 100 mg/l CaCO<sub>3</sub> is considered harmful to aquatic life (<http://www.probeinternational.org/ebi/contaminants/cadmium.html>). The EPA has set a maximum contaminant level of 0.005 ug/L cadmium for drinking water (<http://www.epa.gov/safewater/mcl.html#mcls>).

The proposed interim limits on lead, 560 ug/L is 2000 times the limit deemed acceptable in the Water Quality Control Plan for the Sacramento River Basin. The Center for Disease Control says lead poisoning is the most common and devastating environmental disease affecting young children. (<http://orgs.unca.edu/eqi/lead.htm>) The EPA has set a maximum contaminant level of ZERO ug/L lead for drinking water with an "action level" of .015 ug/L (<http://www.epa.gov/safewater/mcl.html#mcls>).

The proposed interim limits on Thallium, 5900 ug/L is 3000 times the limit deemed acceptable in the Water Quality Control Plan for the Sacramento River Basin. Thallium can affect the human nervous system, lung, heart, liver, and kidney if large amounts are eaten or drunk for short periods of time. Temporary hair loss, vomiting, and diarrhea can also occur and death may result after exposure to large amounts of thallium for short periods. Thallium can be fatal from a dose as low as 1 gram. (<http://www.atsdr.cdc.gov/toxprofiles/phs54.html>) The EPA has set a maximum contaminant level of .005 ug/L lead for drinking water (<http://www.epa.gov/safewater/mcl.html#mcls>).

Levels for Zinc and Copper, known toxins for aquatic life, are several hundred times the limits deemed acceptable in the Water Quality Control Plan for the Sacramento River Basin.

The Empire mine has been aware of this problem ever since the Regional Board notified them in 1981. We are concerned that the park has not addressed this problem sooner. We are especially concerned that the park recently embarked on the multi-million dollar construction of a historical "ride" for visitors before protecting the well-being of the local residents.

We believe that the State Parks have the resources to address this problem well before the year 2010, as the interim limit allows. We are concerned that the parks have already had enough time to address this problem, and are not taking seriously the concerns of our community. Please reduce the acceptable interim constituent levels and require that final limits be met well before 2010.

Please protect us.

Sincerely,  
 Frederick Hall  
 139 Buckingham Ct.  
 Grass Valley, CA 95949-9635

To: Regional water Board, c/o mhall@waterboards.ca.gov  
 From: Cindy Rubin  
 Address: 617 Walsh Street, Grass Valley, California 95945

Dear Board Members,

I am deeply concerned about the proposed interim limits for effluents that drain out the "Magenta Drain" from Empire Mine State Park. This waterway is not "out in the country." It passes through a community park close to Grass Valley City Hall then joins a small creek that flows past Hennessy Elementary School. From there, it flows through Grass Valley downtown, literally one block from Main Street.

The proposed interim limits for cadmium, 2,100 ug/L is 8,000 times the limits deemed acceptable in the Water Quality Control Plan for the Sacramento River Basin. At 5 ppb cadmium causes nausea, vomiting, diarrhea, muscle cramps, salivation, sensory disturbances, liver injury, convulsions, shock and renal failure. The International Agency for Research on Cancer (IARC) has determined that cadmium is carcinogenic to humans. A concentration of 0.001 mg/l in freshwater hardness above 100 mg/l CaCO<sub>3</sub> is considered harmful to aquatic life (<http://www.probeinternational.org/ebi/contaminants/cadmium.html>). The EPA has set a maximum contaminant level of 0.005 ug/L cadmium for drinking water (<http://www.epa.gov/safewater/mcl.html#mcls>).

The proposed interim limits on lead, 560 ug/L is 2,000 times the limits deemed acceptable in the Water Quality Control Plan for the Sacramento River Basin. The Centers for Disease Control says lead

poisoning is the most common and devastating environmental disease affecting young children (<http://orgs.unca.edu/eqi/lead.htm>). The EPA has set a maximum contaminant level of ZERO ug/L lead for drinking water with an "action level" of .015 ug/L (<http://www.epa.gov/safewater/mcl.html#mcls>).

The proposed interim limits on Thallium, 5,900 ug/L is 3,000 times the limits deemed acceptable in the Water Quality Control Plan for the Sacramento River Basin. Thallium can affect the human nervous system, lung, heart, liver, and kidney if large amounts are eaten or drunk for short periods of time. Temporary hair loss, vomiting, and diarrhea can also occur and death may result after exposure to large amounts of thallium for short periods. Thallium can be fatal from a dose as low as 1 gram (<http://www.atsdr.cdc.gov/toxprofiles/phs54.html>). The EPA has set a maximum contaminant level of .005 ug/L lead for drinking water (<http://www.epa.gov/safewater/mcl.html#mcls>).

Levels for Zinc and Copper, known toxins for aquatic life, are several hundred times the limits deemed acceptable in the Water Quality Control Plan for the Sacramento River Basin.

The Empire Mine has been aware of this problem ever since the Regional Board notified them in 1981. I am concerned that the park has not addressed this problem sooner. I am concerned that the park recently embarked on the multimillion dollar construction of an historical adit "ride" for visitors before protecting the well-being of the local residents.

I believe that the State Parks have the resources to address this problem well before the year 2010, as the interim limit allows. I am concerned that the parks have already had enough time to address this problem and are not taking seriously the concerns of my community.

Please reduce the acceptable interim constituent levels and require final limits be met before 2010.

Sincerely,  
Cindy Rubin

Resident and homeowner in the City of Grass Valley  
Participant, Wolf Creek Community Alliance (WCCA)  
Member, Redbud Chapter, California Native Plant Society (CNPS)  
Member, South Yuba River Citizens League (SYRCL)  
Member, Sierra Foothills Horticultural Society  
Participant, Citizens Concerned About Traffic (CCAT)

Please note: The comments that I have submitted are strictly as a private citizen and not as a representative of any of the above-listed organizations.

5 May 2006

Central Valley Regional Water Quality Control Board, NPDES Unit

Dear members of the Board:

As a resident of Grass Valley--Nevada City I am forwarding to you this information on Wolf Creek toxicity by way of asking you please to make any renewal of the permit granted to the Empire Mine to discharge water into Wolf Creek contingent upon clean-up of the water to be discharged.

Thanks much,

Michael Brackney  
Brackney Indexing Service  
11254 Burjer Road  
Nevada City, CA 95959  
265-5835

Melissa

I've read your draft permit for effluent limits for Empire Mine and Magenta Creek and I do not believe the interim limits are appropriate. The interim limits and very very long time frame under which they will apply contain exceptionally high levels of metals and seem designed to reflect what has been draining from the mine into surface waters than what should be released into surface waters.

I ask that you research how long these interim limits have been in place for this permittee and specifically report that to the Board. They need to have some context for the amount of leeway that has been given to Empire Mine. I would also ask that you research information on the length of time major private dischargers are given to comply with limits closer to the final limits in the permit and publicly report on the similarities and differences in treatment between state entities and private entities in their permit requirements.

The mercury limit in and of itself is outrageously high. The Bear River is already listed as impaired and there is probably enough evidence to list Wolf Creek for mercury as well. To continue to allow such high discharges into an impaired waterbody seems to me to be a flagrant violation of the intent of the Clean Water Act.

I would be more willing to consider interim limits if they were substantiated based on solid pre- and post-mine remediations and time frames, and with a clause in the permit that would find the permittee out of compliance if they were not actively proceeding down the remediation path, on schedule with it, and spending sufficient amounts of money on monitoring and assessment to determine exactly what effects the remediation is having.

Kim Taylor  
10231 Mills Road  
Grass Valley, CA 95945

Dear Ms Hall

The proposed standards review for water quality in Wolf Creek far exceed what has been considered acceptable by the scientific community. Whether it be cadmium, arsenic, lead, thallium, mercury or copper, the amounts of these substances draining into the creek are unacceptable. While funds are expended on an unnecessary underground "mine experience", the creek continues to pose a hazard to this community. Wolf Creek runs thru my backyard. Had I known that the arsenic level at some places was 35,400ug/L, I might have stopped my kids from swimming in it. Now it is too late for them, but I urge you and the board members to seriously consider reducing these toxins to reasonable levels.

Sincerely, Stuart W. Hoffmann

To: Regional water Board, c/o mhall@waterboards.ca.gov  
 From: Jackie and James Waterfall  
 Address: 11034 Crescent Drive  
 Nevada City, CA 95959  
 jjwaterfall@theunion.net

Dear Board Members,

Hey, I'm really concerned about the proposed interim limits for effluents that drain out the "Magenta Drain" from Empire Mine State Park. This waterway is not "out in the country." It passes thru a community park within 1/4 of Grass Valley City Hall then joins a small creek that flows past Hennessy elementary school. From there, it flows thru Grass Valley downtown, literally one block from Main St.

**THIS IS A PARK THAT I TAKE MY GRANDKIDS TO.**

The proposed interim limits for cadmium, 2100 ug/L is 8000 times the limits deemed acceptable in the Water Quality Control Plan for the Sacramento River Basin. At 5 ppb cadmium causes nausea, vomiting, diarrhea, muscle cramps, salivation, sensory disturbances, liver injury, convulsions, shock and renal failure. The International Agency for Research on Cancer (IARC) has determined that cadmium is carcinogenic to humans. A concentration of 0.001 mg/l in freshwater hardness above 100 mg/l CaCO<sub>3</sub> is considered harmful to aquatic life (<http://www.probeinternational.org/ebi/contaminants/cadmium.html>). EPA has set a maximum contaminant level of 0.005 ug/L cadmium for drinking water (<http://www.epa.gov/safewater/mcl.html#mcls>)

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system, lung, heart, liver, and kidney if large amounts are eaten or drunk for short periods of time. Temporary hair loss, vomiting, and diarrhea can also occur and death may result after exposure to large amounts of thallium for short periods. Thallium can be fatal from a dose as low as 1 gram. (<http://www.atsdr.cdc.gov/toxprofiles/phs54.html>) The EPA has set a maximum contaminant level of .005 ug/L lead for drinking water (<http://www.epa.gov/safewater/mcl.html#mcls>)

Levels for Zinc and Copper, known toxins for aquatic life, are several hundred times the limits deemed acceptable in the Water Quality Control Plan for the Sacramento River Basin.

The Empire mine has been aware of this problem ever since the Regional Board notified them in 1981. We are concerned that the park has not addressed this problem sooner. We are concerned that the park recently embarked on the multi-million dollar construction of a historical adit "ride" for visitors before protecting the well-being of the local residents.

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Please reduce the acceptable interim constituent levels and require final limits be met before 2010.

Sincerely,

Jackie and James Waterfall

I am deeply concerned about the proposed interim limits for effluents that drain out the "Magenta Drain" from Empire Mine State Park. This waterway is not "out in the country." It passes thru a community park within ¼ of Grass Valley City Hall then joins a small creek that flows past Hennessy elementary school. From there, it flows thru Grass Valley downtown, literally one block from Main St.

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Timothy Kimball

Dear Melissa

I have heard that the Magenta Drain that drains out of Empire Mine is contributing large amounts of arsenic to wolf creek. Our property borders the creek our well is also fairly close. We are concerned that this poison is being allowed to flow into the waterway, potentially poisoning the wildlife and possibly our drinking water. What can be done to reduce this problem?

Sincerely,

Paul Mellersh  
Creek View Drive, Grass Valley.

Melissa Hall  
NPDES Unit  
Central Valley Regional Water Quality Control Board

Dear Board Members,

I am deeply concerned about the proposed interim limits for effluents that drain out the "Magenta Drain" from Empire Mine State Park. This waterway is not "out in the country." It passes thru a community



park within ¼ of Grass Valley City Hall then joins a small creek that flows past Hennessy elementary school. From there, it flows thru Grass Valley downtown, literally one block from Main St.

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Please reduce the acceptable interim constituent levels and require final limits be met before 2010.

Sincerely,

Marisha Finkler  
Watershed Scientist  
Friends of Deer Creek

Dear Ms. Hall,

I understand that a creek in my neighborhood is contaminated with arsenic and cadmium due to runoff of Empire Mine State Park area. Please see about this.

Sincerely,

Elise Hougesen